



Federal Air Surgeon's Medical Bulletin



Vol. 44, No. 3
2006-3

Aviation Safety Through Aerospace Medicine
For FAA Aviation Medical Examiners, Office of Aerospace Medicine Personnel,
Flight Standards Inspectors, and Other Aviation Professionals.

U.S. Department of Transportation
Federal Aviation Administration

HEADS UP →

2. **Editorial: What's Up? Age-60 May Be Changing**
3. **'Passed Flight Physical, So I Must Be Healthy!'**
4. **Certification Update: The Saga of Automation**
6. **Case Report: Cerebral Lymphoma**
8. **Case Report: Migraine Headaches and Cerebrovascular Accident**
9. **Letters to the Editor**
10. **OAM News: New Deputy, Flight Surgeon in Great Lakes**
11. **AirVenture '06: Reports of Hard Work and Endurance**
12. **AME Seminar Schedule**



Is FAA's Web-Based Technology Investment Justified?

FAA Administrator Reports Progress to Airmen

By Mike Wayda

THE FEDERAL AVIATION Administration has made a huge investment in innovative technology and procedures to make same-day medical certification for pilots a reality. Just how effective were these efforts?

FAA Administrator **Marion Blakey**, speaking to an audience of pilots at the Experimental Aircraft Association's AirVenture fly-in at Oshkosh, Wis., declared, "You wanted the Federal Air Surgeon to modify the medical certification system to reduce delays airmen were

experiencing in the issuance of medical waivers. That's just what we did. We've been making changes incrementally for quite some time, and the IT [information technology] investment—handling these electronically—is paying off."

Administrator Blakey and senior FAA staff had a productive visit at the annual fly-in. Because of the Office of Aerospace Medicine's innovations to resolve the backlog in special issuance medicals,

Continued on page 11

QUICK FIX

E-Mail is Coming

By Richard 'Dick' Jones, MD

PROBLEM: In this day of rapid communication, the FAA is still using "snail mail" for most communication. This is a very uncertain method of ensuring information is received by anyone.

RESULT: One important way we inform aviation medical examiners of policy or procedure changes is through the *Federal Air Surgeon's Medical Bulletin* (FASMB); however, many AMEs do not read this publication religiously or carefully, so it is always uncertain whether or not the information has reached the target audience. The FASMB is sent to AME offices through the mail, just like most other correspondence from the Aerospace Medical Certification and Education Divisions. Frequently, this mail is sorted by staff and discarded without the AME seeing it or the AME

will not realize its importance and throw it away. Therefore, notifications about designation renewal, impending training delinquency, or problem examinations are sometimes not acted upon, and we have no way of knowing that the AME did not see the material.

These communication problems require that we begin using E-mail as our primary means of getting urgent or important information to AMEs. There are some steps AMEs must take, however, to ensure they receive FAA E-mail. We must have your correct E-mail address, the one where you want to receive messages, not necessarily your office address. You must take certain measures to make certain that any spam-blockers installed on your system do not block FAA correspondence.

Continued on page 5

What's Up?

MAYBE THE AGE of pilots flying for United States airlines.

In 1959, the Federal Aviation Administration (FAA) established a rule (the "Age-60" Rule) that required airline pilots to retire upon reaching their 60th birthday.

Since that time, there have been many unsuccessful petitions to exempt people from the rule, and many unsuccessful challenges to the rule in court. Although there have been several research studies performed to determine if a change to the rule was appropriate, the results have always been insufficient to support such a change.

In 1978, the International Civil Aviation Organization (ICAO) modified their standards to permit first officers to fly until their 65th birthday,



Should the FAA Change Its Age-60 Rule?

and in 1999, the Joint Aviation Authority (JAA) in Europe adopted an age-65 rule that allowed either pilot to fly until his or her 65th birthday as long as the other pilot was under 60.

Both of these changes have made the U.S. position more difficult to defend because of the Chicago Convention, an agreement that requires ICAO countries to allow airlines from other ICAO countries to enter if they meet ICAO standards. So, while the U.S. has steadfastly adhered to the Age-60 rule for U.S. airlines, we have allowed airlines from other ICAO countries to fly in and out of our country for years with co-pilots who are over 60.

Effective this November, the ICAO standard will change for multi-crew settings to allow pilots to serve as pilot-in-command up to age 65, provided the other pilot is under age 60.

As you might imagine, this new ICAO standard has created a lot of angst in the U.S. airline community. The question is, "Should the FAA change its Age-60 rule to mirror the ICAO standard?"

For various reasons, there are factions weighing in on both sides of the debate, so FAA Administrator **Marion Blakey** has commissioned an advisory committee (Aviation Rulemaking Committee, or ARC) to help her make the right decision. If the decision is to change the rule, the ARC will also make recommendations on how to implement those changes.

The ARC will be co-chaired by individuals from the Air Transport Association and the Airline Pilots Association, I will serve as the responsible federal official, and other members will represent the airlines, unions, and the medical community. The plan is to complete our deliberations and provide a report to the Administrator by November 15.

In 2000, former Federal Air Surgeon **Jon Jordan** wrote, "In my tenure with the Federal Aviation Administration, I have had the opportunity to see a number of contentious issues arise, fade, and then arise again – some repeatedly. None, however, has been more contentious than the age 60 limit that is applicable to air carrier pilots."

Later in the same editorial he said, "Few people like inflexible, discretionary rules, and I am among them. Unfortunately, how to solve the problem of deterioration in performance with aging and its impact on aviation safety is an enigma. I only wish I knew the answer."¹

It looks like we may have the opportunity to find an answer to "Jon's enigma." Stay tuned.

— **Fred**

Federal Air Surgeon's Medical Bulletin

Library of Congress ISSN 1545-1518

Secretary of Transportation

Maria Cino (Acting)

FAA Administrator

Marion C. Blakey

Federal Air Surgeon

Fred Tilton, MD

Editor

Michael E. Wayda

The Federal Air Surgeon's Medical Bulletin is published quarterly for aviation medical examiners and others interested in aviation safety and aviation medicine. The Bulletin is prepared by the FAA's Civil Aerospace Medical Institute, with policy guidance and support from the Office of Aerospace Medicine. An Internet on-line version of the Bulletin is available at: www.faa.gov/library/reports/medical/fasmb/

Authors may submit articles and photos for publication in the Bulletin directly to:

Editor, FASMB
FAA Civil Aerospace Medical Institute
AAM-400
P.O. Box 25082
Oklahoma City, OK 73125
e-mail: Mike.Wayda@faa.gov

¹"Age 60: An Enigma," editorial by Jon L. Jordan, MD, JD. *Federal Air Surgeon's Medical Bulletin*, spring 2000, p2. Available online at www.faa.gov/library/reports/medical/fasmb/editorials_jj/age60/

'I Passed My Flight Physical, So I Must Be Healthy!'

Passing the standards for the flight physical does not assure that your general health is good...

By David Bryman, DO

I HAD AN INTERESTING experience flying my Piper Warrior (PA-28-161) down to Mexico this summer as part of a volunteer medical team. I left Scottsdale early in the morning and flew the first leg to Guaymas, Mexico, an uneventful flight that took a little over three hours.

The weather was hazy with light headwinds. The next part of the trip was over approximately 85 NM of water to Mulege, located in Baja Sur. I climbed to 4,500 feet, turned up the music, and was thoroughly enjoying the beautiful scenery and perfectly smooth conditions.

The normal engine hum was suddenly interrupted by an intermittent roughness that I have never experienced before. Unfortunately, at that time I was approximately 40 miles from the nearest land. I tried several things to improve the engine roughness such as leaning the mixture, changing fuel tanks, and a trial of carburetor heat. I soon realized that the engine roughness was not going to improve by these measures.

The situation progressed and the engine began to vibrate roughly. I had difficulty holding altitude as I was unable to get full power. Luckily, the shore was closer now, and I was able to land the airplane on a small dirt strip at the edge of the bay.

I found out later that there were several mechanical problems that led to this unplanned landing. Apparently, there was

a stuck exhaust valve on the number-4 cylinder, a bad magneto, and several fouled spark plugs (to name a few).

The surprising part to me was that the airplane had come out of an annual inspection one day prior to my trip. I think I was lulled into a false sense of security by the annual and very surprised that the mechanical problems were not discovered and prevented.

Are pilots lulled into a false sense of security about their general health after passing a flight physical, just as I was after my airplane's annual?

Only later did I find out that items like exhaust valves and such are not routinely checked at a normal annual. I guess I expected the annual inspection would uncover most potential problems with the airplane, not realizing that some problems are not very obvious, and one must look deeper, depending on the symptoms (of which there were none at that time).

I realized that there are similarities when a pilot gets an FAA medical exam from an aviation medical examiner. The FAA medical is designed to determine if a pilot is fit to fly an airplane, and that he/she meets the medical standards set forth by the FAA. For example, the standard for distant vision for a first class medical is 20/20, with or without corrective lenses. If the pilot does not meet the standards, then he/she is not issued a medical certificate.

The eye exam portion is not designed to uncover other ophthalmologic conditions such as early glaucoma or determine subtle conditions in the optic fundus, for example.

There is an important distinction between passing the minimum standards allowable to obtain an FAA medical certification and determining general health and fitness of a patient. The FAA medical exam is a general exam that reviews medical history (with attention to disqualifying medical conditions), current medications, blood pressure, pulse, visual and hearing tests, as well as a urine test that looks for sugar and protein. It is not designed to be a comprehensive physical or a substitution for a good preventive medical evaluation.

The general pilot medical exam does not include lab work for PSA, cholesterol, blood sugar, liver profile, and so on. Also, the routine evaluations such as mammography, PAP smear, and colonoscopy are typically not included, (although they should be discussed by the AME and recommended if necessary). I do know many AMEs that will offer a prostate exam to the pilots as part of the general evaluation.

The AME will have to be more thorough if physical abnormalities are discovered at the time of the exam. For example, if a pilot is diagnosed with hypertension and given medical treatment, he/she must have lab work, including blood sugar, kidney function, and cholesterol. The pilot will need to have an EKG and, in some cases, even a stress test to check if there are any heart problems as a result of the high blood pressure.

Remember, passing the standards for the flight physical does not assure that your general health is good and there are no underlying conditions that need to be addressed. I wonder if there are pilots that might be lulled into a false sense of security about their general health after passing a flight physical, just as I was after my airplane's annual. My advice to pilots is to get your valves checked, so you don't wind up landing somewhere you didn't intend on landing!



This article is a reprint (with permission) of an article that appeared in the July 2006 issue of Flight Physician, a publication of the Civil Aviation Medical Association. Dr. Bryman is the Association's president and a senior aviation medical examiner for the Federal Aviation Administration, Transport Canada, and the Joint Aviation Authority.

The Ongoing Process of Going Totally Electronic

MY ARTICLE in the summer *Federal Air Surgeon's Medical Bulletin* [FASMB vol. 44-2, p. 3] about the new FAAMedXPress addition drew a whole bunch of phone calls and E-mails, mainly because I had neglected to mention that we will not be ready to "turn it on" until early November 2006.

This is because we received funding to make two additions. One is a *broadcast message* capability, which will enable us to send either all aviation medical examiners an E-mail message or to pick specific AMEs and send them a message. Of course, we will have to have your E-mail address to do this! As part of this upgrade, we will also know if you opened the message.

The other addition is the capability to place an electronic survey onto the tail end of the FAAMedXPress. We need to hear from airmen that choose to complete the electronic version of the exam, and this addition will enable us to do this.

Auto Letters

Some of your airmen may be telling you about the letters that they have received shortly after you performed their flight exam. I need to also inform you all of a change in our business processes. I believe I told you that we have a promise to the FAA Administrator that we will review within 30 days any priority exams that arrive in the Aerospace Medical Certification Division (AMCD). Well, this new process is another way that we are living up to this promise.

You need to know that we are concentrating on reviewing *priority* cases. These are *unissued*, *denied*, potential *initial appeals*, and *recertification* cases. When a new exam arrives in at the AMCD, it is sent to Autocoding; then if it is a priority case, it will go to Triage. Here, a legal instrument examiner (actually one of our Quality Assurance folks) reviews the case. This is being



Certification Update

*Information About
Current Issues*

By Warren S. Silberman, DO, MPH

done on a daily basis, so the cases that came in the day prior are actually being touched within 24 hours. If the case is *unissued*, the legal instrument examiner will send it for one of the "auto letters." (You really should be reading these letters.)

*We will not be ready to
'turn on' FAAMedXPress
until early November
2006...*

One auto letter states that your FAA exam that was performed on a certain date and sent into AMCD on another date. The purpose of this is to specify who is responsible for transmission delays (generally the AME) by indicating when the exam has arrived here. The letter then goes on to say that your AME indicated that reports are being forwarded to the Regional office. In this situation, the AME has noted in block #60 that they have sent the supporting documentation to their Regional office for processing. Therefore, we will await the Region's decision.

Another letter that could be sent mentions that we received the exam (first sentence in the above paragraph). It then informs the airman that we have not received the supporting documentation that the AME said was to be forwarded. We tell the airman that his/her case will be forwarded to a "Hold Queue."

A third Auto letter choice informs the airman about the date of exam and that it has arrived here in AMCD, as above.

The next sentence states that we have everything required to work the case, and we are going to process it.

Should the airman be sent one of the first two (above) letters, the case (exam/MID) is then forwarded to a Hold Queue. It remains in the queue for 22 days (chosen because most exams and material arrive here within 22 days). If we have not received anything at that point, another letter is "automatically" sent; yes, without a person touching the case. The letter says that we will begin processing the case and sends them an "information request," depending on our review. Obviously, after review, we may send them either a denial or an authorization letter.

In all situations, the case is then electronically sent to Coding and then on to Review. If the legal examiner determines that there is insufficient information available to make a determination, the case will again be sent to a Hold Queue. If we do not receive the information requested, a "Failure to Provide" letter is sent.

Medications update

Darifenacin (trade name Enablex) is a newly acceptable medication that was approved by the FDA on 12/22/04. It is a competitive muscarinic receptor antagonist. Thus, it works by antagonizing acetylcholine at the muscarinic receptors, relaxes bladder smooth muscle, and inhibits involuntary detrusor muscle contractions. Currently, the FAA does not accept Oxybutynin chloride (Ditropan) but does accept Tolterodine tartrate (Detrol). We reviewed several studies that demonstrated that darifenacin does not cause performance decrement in driving, and we can then extrapolate this to flying.

Common errors airmen make

I should inform you of some "hot button" errors airmen commonly make that cause extra work and delays:

Continued...

Dr. Silberman manages the Civil Aerospace Medical Institute's Aerospace Medical Certification Division.

1 Tell your airmen that when AMCD requests specific testing to provide the ones we specify, performed the way we request. If their treating physician wants to deviate from our recommendations, they would do best by calling a “time out” and discussing this with you, the Regional Medical Office, or Medical Certification in Oklahoma City. The perfect example that comes to mind is exercise stress testing. We want applicants to discontinue their beta-blocker or other medications that can blunt the exercise response. Obviously, they should do this under the guidance of their treating physician. We emphasize that they are to exercise for a minimum of nine minutes and at 100 percent of their maximal heart rate. However, we often contend with applicants whose physicians have ignored our specifications. We want these tests performed a specific way for an aeromedical reason. You should inform your airmen that failure to perform requested testing according to our guidelines may result in our not accepting a waiver request or even denying medical certification.

2 Please inform your airmen of Web sites that are good aeromedical reference sources. The individuals that provide information to these sites generally work with us and know our requirements.

- www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ (especially, the online *Guide for Aviation Medicine Examiners*)
- www.AOPA.org
- www.EAA.org
- www.AviationMedicine.com
- www.LeftSeat.com

AOPA (Aircraft Owners and Pilots' Association) and EAA (Experimental Aircraft Association) require that you to be a member to access their online medical advice. The airman should go to the Web site and print out the specifications for their particular medical condition and take them to their treating physician so as to inform the physician of what the FAA requires to make a waiver determination. The FAA makes every attempt to request only those evaluations and tests that they and their consultants determined provide the most benefit to make a certification decision. Please note that I am definitely not attempting to belittle the intelligence of those of you who really understand how we in Aerospace Medicine decide what testing to request for a specific

medical condition that allows us to determine whether a particular condition has a propensity for sudden incapacitation. We receive many comments from airmen (or their physicians) that question our reasoning for requesting a particular test. If you, the AME, want to know why we have requested a particular test, please feel free to phone us or your Regional Office and ask.

3 Probably the most irksome thing that treating physicians do is to tell their airmen patients that they “can see no reason why you cannot pilot an aircraft” and should return to flying. I never thought I would say this because I did not like it when a specialist did it to me, but the fact is that if physicians do not understand how high altitude affects the human body or know what the FAA requires of airmen with a particular medical condition, they should not say anything! I admire those physicians (and I have seen a few of them) that in their final conclusions state, for example, that they bow to the FAA for final determination as to the suitability for flying for their patient with a seizure disorder on Tegretol... or their patient with a cardiomyopathy and ejection fraction of 25 percent!

4 Please reinforce to your certification applicants that, when they are to provide the FAA with testing and medical evaluations, to collect all the documentation and send it to us in **one** packet. This goes with issue number one (above). I cannot tell you how many times they provide us results in dribs and drabs. What we end up doing necessitates re-reviewing their cases and resending information request letters. This will surely result in delayed decisions. Something that goes hand-in-hand with this is when we request a “current” status report or test result. Perhaps you know that the FAA's definition of *current* is an evaluation or test performed within the previous 90 days.

I recommend that your copy these four comments and hand them out to your applicants when they initially present for an FAA medical examination. It will definitely reduce the processing time for us here and will provide the airmen with a quicker decision.

Stay tuned

In the next *Bulletin*, I hope to resume our regular case presentations.



E-MAIL from page 1

SOLUTION: Inform your regional office of the E-mail address at which you prefer to receive messages from us, if you are not sure they already have it. Check to see if your favorite electronic mail program has been “eating” your routine correspondence from us. Here's how you can check to see if the program you are using has been set properly to identify mail from the FAA:

Many E-mail service providers, including AOL,¹ Hotmail, and Yahoo!, have created spam² filters to prevent unwanted messages from reaching your inbox. Unfortunately, these filters can also block E-mail messages you actually want to receive, such as those from FAA. To ensure continued receipt of our E-mails, you should add our E-mail address, “**ame.seminar.registration@faa.gov**”, to your address book and reconfigure your spam filter, if you use one. We will use this address to notify you of other addresses you might need to permit in the future. The instructions below provide specific recommendations based on which E-mail provider you use:

For AOL subscribers

Add us to your address book to receive our incoming E-mail messages:

- Click the “Address Book” button on the AOL Mail page.
- Click the “Add Contact” button.
- Type “**ame.seminar.registration@faa.gov**” into the “Screen Name” field and click “Save.”
- Make sure you click “enable links and images” to properly view our HTML emails and promotional coupons.

AT&T subscribers

AT&T uses Spam Blocker to automatically stop suspected unsolicited E-mail messages from reaching your mailbox. Unfortunately, this filter can mistakenly block real messages you want to receive, such as E-mails from FAA. Messages that are identified as possible spam are automatically deleted unless you choose the “Hold for Review” option. This option stores questionable messages for 3 days in a Web E-mail folder labeled “Screened Mail Folder.”

Continued on page 7

Primary Cerebral Lymphoma: Clinical and Aeromedical Considerations

Case Report, by Patrick R. Storms, MD, MPH

Cancer, and the complications of cancer therapy, can present significant obstacles to the airman wishing to return to flying status. This case illustrates the aeromedical considerations and certification issues for a patient presenting with performance issues progressing to discreet neurological findings, culminating in the diagnosis and treatment of primary CNS lymphoma.

History. A 45-year-old charter pilot with 6,030 flying hours presented for renewal of his first-class medical certificate in April 2002. He reported that he had experienced difficulty with the cognitive aspects of primary flight training, having to struggle more than he thought that he should. In spite of that, he successfully completed training and began flying charters. On one occasion, while flying, he noted that he was having difficulty managing his flying tasks. He immediately reported

the incident to his supervisor and made plans to visit his physician the following morning. He had some sharp right-sided headaches that evening, and in the morning suffered the acute onset of focal seizure activity in the right arm and right leg, associated with flashing scotomata. He was taken to the hospital by ambulance. During transport his consciousness was clouded and he had several additional focal seizures. His history was remarkable for mild hypertension, controlled with Lotensin,

and his surgical history was notable only for a remote appendectomy. His application was deferred to the Aerospace Medicine Certification Division for further evaluation.

Social History. The applicant has no history of tobacco or alcohol use.

Family History. No significant illnesses in family members.

Physical Examination. He was drowsy on presentation, with normal vital signs, and no fever. His head and neck were unremarkable, with no neck stiffness. Lungs were clear; heart was regular without murmur, and the abdomen was soft without tenderness or masses. Extremities were normal in appearance and function. His neurologic examination was notable for clouded sensorium with no focal findings; motor and sensory exam, normal.

Hospital Course. Drug screen on admission was normal. ACT of the head

Continued →

PRIMARY CEREBRAL LYMPHOMA

Clinical Presentation

As with other primary brain tumors, four main circumstances generally lead to presentation and diagnosis. First, patients may have generalized or focal seizures. Second, increased intracranial pressure may cause nausea, vomiting, headaches, or visual disturbances. Third, progressive focal neurologic symptoms may announce the presence of a tumor. Finally, cognitive dysfunction could occur, particularly in frontal lobe tumors.

Primary CNS lymphoma

is defined as non-Hodgkin's lymphoma confined to the craniospinal axis. It was previously a rare tumor, accounting for fewer than 5% of primary CNS malignancies and only 1-2% of all lymphomas. The incidence of primary CNS lymphoma has increased remarkably in the last 20 years, with particular growth in the subgroup of immunocompromised patients. While the Epstein-Barr virus has been implicated in the development

of primary CNS lymphoma in immunocompromised patients, the cause in immunocompetent patients remains unknown. The patient generally presents as the applicant described in this case report, with focal neurological symptoms and evidence of increased intracranial pressure. The mean age at diagnosis in immunocompetent patients is 55 years.

Diagnosis

Diagnosis relies on pathological study of the tumor. 80-90% of cases are large-cell diffuse B-cell lymphoma. System involvement is uncommon at onset (<5%) but evaluation should include HIV testing, chest radiography, evaluation of the cerebrospinal fluid, and careful clinical assessment.

Treatment. Surgical resection provides little long-term benefit as the sole therapy, given the locally infiltrative nature of the disease. Whole-brain irradiation often results in complete resolution of measurable disease, but the duration of response is usually in

the range of 10-14 months. A variety of chemotherapeutic agents have been used since the 1970s, with no single regimen achieving universal acceptance. With the addition of chemotherapy, survivals have been reported as high as 42.5 months in those who responded to therapy.

Prognosis

With multimodal therapy utilizing surgery, whole-brain irradiation, and systemic (and perhaps intrathecal) chemotherapy, median survival of up to 40 months has been reported. Concern has been raised about neurotoxicity in long-term survivors, particularly those over age 60. Cognitive dysfunction, ataxia, and dementia may be seen as a consequence of leukoencephalopathy and brain atrophy. Thus, long-term follow up of patients must include not only disease-free survival time, but also serial neuropsychometric evaluation and quality of life assessments.

Patrick R. Storms MD, MPH, USAF, MC, was a resident in aerospace medicine when he wrote this case report at the Civil Aerospace Medical Institute.

was performed to better evaluate the focal seizures, which detected a large, left parieto-occipital mass. The tumor was removed and was diagnosed as a large-cell malignant lymphoma. CT scan of the abdomen and chest revealed no additional lymphadenopathy, and a gallium scan was negative. The airman received postoperative chemotherapy with Adriamycin, Solu Medrol, high-dose ara-C, platinum, and high-dose methotrexate, given systemically and intrathecally. He also received whole brain irradiation with 4500 cGy delivered in 25 fractions over 35 days.

Aeromedical Disposition. Cancer is a disqualifying condition, according to current FAA policy. Pilots diagnosed with lymphoma are obligated under 14 CFR Part 61.53 to ground themselves until their case is reviewed by the FAA. Most cancers require documentation of successful removal of the tumor, completion of any therapy, and the absence of metastatic disease before the FAA will favorably consider an airman's application for a medical certificate. Specifically, primary cerebral lymphoma is disqualifying under Title 14 of the Code of Federal Regulations (CFR) Parts 67.109 and 67.113b2. However, Part 67.401 provides authority for Special Issuance of a Medical Certificate (Authorization), valid for a specified period, if the airman can prove that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force.

If found to be free of recurrent lymphoma and to be neurologically intact after completion of therapy, applicants can be considered for a time-limited medical certificate, provided that they are otherwise qualified.

Case Outcome. All therapies were completed by June 2000, and the patient has recovered well. His only residual neurological symptom is the need to

Continued on page 12

E-MAIL from page 5

To change your E-mail preference to "Hold for Review," follow these steps:

- Go to <https://memberservices.att.net/msws/E-mailScreener>.
- Log in with your username and password.
- Click on "Spam Blocker Options" or "Your Spam Blocker."
- Select the "Hold for Review" option listed under "ON."
- Click the "Submit" button.

If you find that our E-mails are incorrectly identified and filtered as spam, please forward one of our filtered E-mails to AT&T at at-is-not-spam@worldnet.att.net. Although this will not immediately guarantee you will receive our E-mails in your inbox, it will help AT&T improve their filtering technology.

BellSouth subscribers

BellSouth uses MailGuard to shield its users from unwanted spam. Unfortunately, this filter can mistakenly block messages you want to receive, such as E-mails from FAA. Messages that MailGuard identifies as spam are automatically deleted unless you choose the "Review" option. The "Review" option stores spam for 7 days in a Web E-mail folder labeled MailGuard.

To turn on the "Review" option so that suspected spam messages will be stored for 7 days in a MailGuard folder:

- Log in to BellSouth Web E-mail service, located at <http://webmail.bellsouth.net>.
- Enter your username and password.
- Click on "MailGuard Options" in the column on the left.
- Select the "Review for 7 days" option, listed under "ON."

If you find that our E-mails are incorrectly being identified and filtered as spam, please forward one of our filtered E-mails to BellSouth at at_is_good@bellsouth.net. Although this will not immediately guarantee you will receive our E-mails in your inbox, it will help BellSouth improve their filtering technology.

Cablevision subscribers

Occasionally, Cablevision mistakenly filters E-mails you want to see and routes them to your SpamAway bulk mail folder. Since SpamAway stores suspected spam for 7 days before deleting it, you

can review all messages you receive. If a FAA E-mail is incorrectly categorized as spam, please submit the E-mail to Cablevision at notspam@cv.net within 3 days of your receipt. Although this will not immediately guarantee you will receive our E-mails in your inbox, it will help Cablevision improve their filtering technology.

Comcast subscribers

If you have enabled Comcast's spam filtering, it can mistakenly block messages you want to receive, such as E-mails from FAA. In fact, messages that Comcast identifies as spam are automatically deleted unless you choose the "Keep a Local Copy" option. This option creates a Webmail folder titled "Screened Mail," where all the pieces of suspected spam are placed.

To turn on the Screened Mail option:

- Sign in to Comcast Webmail and select "E-mail Options" from the menu on the left.
- Select "Spam Filter" from the "Mail Options" window.
- Click "Edit/View Spam Filters" from the "Comcast E-mail Settings" list.
- Select "Yes" to "Enable Spam Filtering."
- To keep a copy of each message the spam filter removed from your inbox, select "Yes" to "Keep Local Copy." This moves each spam E-mail to the "Screened Mail" folder.
- Click "Update" to enable spam filtering.

Note that the Screened Mail folder is created the first time you receive a piece of spam, not as soon as you enable the Screened Mail option.

If you find that our E-mails are incorrectly identified and filtered as spam, please forward one of our filtered E-mails to Comcast at at-is-not-spam@comcast.net. Although this will not immediately guarantee you will receive our E-mails in your inbox, it will help Comcast improve their filtering technology.

CompuServe subscribers

Add us to your address book to receive our incoming E-mail messages:

Click the "Address Book" button on the Mail page.

Click the "Add Contact" button.

Type "**ame.seminar.registration@faa.gov**" into the "Screen Name" field and click "Save."

Concluded on page 13

Migraine Headaches and Cerebrovascular Accident Secondary to Patent Foramen Ovale

Case Report, by Kimberly R. Bradley, DO, MPH

In young persons with strokes, in the absence of classic risk factors, atrial septal defects are a frequent finding. Correction of the defect diminishes the risk for future cerebral ischemic events. New research now suggests migraines with aura may also be associated with these type cardiac defects and that surgical treatment may result in a decrease or resolution of migraines.

History. A 19-year-old male presented in February 2003 for Class I flight physical for purposes of initial flight training. On his FAA Form 8500-8, the airman applicant reported a history of dizziness and migraines as a child, last occurring in 2000 at age 16. He also reported a stroke in Dec 1999, patent foramen ovale s/p closure in June 2000. The remainder of his medical history was negative with no other risk factors for stroke. He was on no medications as the time of his aeromedical examination.

The applicant had a chronic history of migraines with aura since early childhood. In December 1999, he woke up experiencing a migraine with the usual accompanying aura in the form of visual-loss, blind-spot scotoma. However, this episode progressed to persistent, localized visual-field loss without any other apparent associated neurologic deficits. He had an extensive neurologic evaluation, including a brain MRI that demonstrated subacute ischemic infarct within the right occipital lobe. Cardiology consultation was obtained, and from a cardiovascular perspective, the applicant was completely asymptomatic. Electrocardiogram was normal. Echocardiography revealed an atrioseptal defect, a small (8mm) patent foramen ovale (PFO) with inducible right-to-left shunting with no other abnormalities noted. In light of this finding, the cerebrovascular ischemic event was believed to be due to a paradoxical embolus passing right-to-left through the PFO. In June 2000,

surgical closure was accomplished by transcatheterization with a 33mm CardioSeal patch across the intra-atrial septum. The applicant was discharged after uneventful overnight observation.

Mild visual field deficits persisted for several weeks but resolved by the six-month follow-up visit. Anti-platelet therapy consisted of one 325mg aspirin per day for six months post-op and was then discontinued. Postoperative echocardiogram at six months post-procedure showed the device to be properly endothelialized within the atrial septum with no residual atrial level shunting. The applicant had reported significant migraine headaches (2-to-5 per week) prior to his procedure, with only three migraines at six months post-op and none since. After his one-year postoperative evaluation, the applicant was released by his neurologist and cardiologist with no further follow up required.

Family History: Non-contributory.

Social History: Applicant is single with no children. No tobacco or alcohol use noted.

Surgical History: Tonsillectomy at age 10; transcatheter closure of patent foramen ovale in June 2000, as previously noted.

Physical Exam: Aeromedical evaluation completed in February 2003. HR 66, BP 120/80. Normocephalic with no bruits. ENT, normal. Lungs, clear to auscultation bilaterally with no restrictions and good excursion. Cardiac exam revealed a regular rate and rhythm with

ATRIOSEPTAL DEFECTS

Cerebrovascular ischemic events associated with atrioseptal defects, including PFO, are well established in the literature (5,7). PFO occurs in 20-27% of individuals worldwide, and it is usually asymptomatic; 40% of stroke patients are found to have PFO on subsequent cardiac work-up (11,12). Paradoxical emboli form at the PFO and pass into the left atrium via an occasional, inducible right-to-left shunt (9).

There is also a significant association between migraines with aura and cerebrovascular ischemic events, characteristically posterior cerebral ischemia as seen in this case (3,10). Paradoxical emboli from PFO may be the cause of some migraine with aura. Patients in recent studies experienced resolution of migraines with aura after satisfactory PFO repair (4,6). Those experiencing migraine without aura do not show improvement after PFO repair (6,8). The only risk factor for stroke in this otherwise healthy applicant was migraines (2).

This case emphasizes the importance of a thorough evaluation of airmen with migraines, particular migraines with aura (6).

no rubs, clicks, gallops, murmurs, S3, or S4 noted. Normal S1 and physiological split S2 present. Abdomen, normal. Good pulses and perfusion in both the upper and lower extremities with no pulse delay appreciated. No peripheral edema, cyanosis, or petechiae present. CNII-XII intact. Good range of motion and strength bilaterally upper and lower extremities. Gait normal. Applicant passed conversational voice test. Distance vision correctable to 20/20 OU. Color vision test passed; field of vision normal to confrontation. The applicant was deferred by the AME for further evaluation due to the disqualifying defects of stroke and migraines.

Continued...

Kimberly R. Bradley, DO, MPH, USAF, MC, was a resident in aerospace medicine when she wrote this case report at the Civil Aerospace Medical Institute.

Aeromedical Disposition: Although PFO with sequelae (in this case, a stroke) would be disqualifying, satisfactory surgical repair negates the issue. Since the applicant's stroke was determined to be due to the PFO and he has no other risk factors, this is also no longer an issue. With resolution of the migraines could these also be attributed to the PFO? The discussion on the association of PFO and migraines, particularly migraines with aura, provided sufficient data to support certification of this applicant [see sidebar, page 8].

References

1. Federal Aviation Administration. *Guide for Aviation Medical Examiners*, October 1999, Ch 2 p 24, 28, Ch 3 pp 45, 63, 68.
2. Rayman RB, Hastings JD, William BR, et al. *Clin Aviat Med* 3rd ed., Castle Connolly Graduate Medical: 2000.
3. Milhaud D, Bogousslavsky J, van Melle G, et al. Ischemic stroke and active migraine, *Neurol* 57(10):1805-11, 2001 Nov 27.
4. Morandi E, Anzola GP, Angeli S, et al. Transcatheter closure of patent foramen ovale: A new migraine treatment? *J Intervent Cardiol* 16(1):39-42, 2003 Feb.
5. Anzola G, Clinical impact of patent foramen ovale diagnosis with transcranial Doppler, *Eur J Ultrasound* 16(1-2):11-20, 2002 Nov.
6. Sztajzel R, Genoud D, Roth S, et al. Patent foramen ovale, a possible cause of symptomatic migraine: a study of 74 patients with acute ischemic stroke. *Cerebrovasc Dis* 2002;13(2):102-6.
7. Lamy C, Giannesini C, Zuber M, et al. Clinical and imaging findings in cryptogenic stroke patients with and without patent foramen ovale: The PFO-ASA Study. *Stroke* 33(3):706-11, 2002 Mar.
8. Wilmshurst PT, Nightingale S, Walsh KP, et al. Effect on migraine of closure of cardiac right-to-left shunts to prevent recurrence of decompression illness or stroke or for haemodynamic reasons. *Lancet* 356(9242):1648-51, 2000 Nov 11.
9. Brenningstall GN, An adolescent with complicated migraine, *Seminars in Pediatric Neurology* 6(3):173-5; discussion 175-6, 1999 Sep.
10. Anzola GP, Magoni M, Guindani M, et al. Potential source of cerebral embolism in migraine with aura: A transcranial Doppler study. *Neurol* 52(8):1622-5, 1999 May 12.
11. Medical Society of New Jersey Web site: www.msnj.org/pdfs/NJMJune%2002/CurrentConcepts.pdf (accessed Aug 2003).
12. WSAZ E-News Web site: www.wsaz.com/hmonday/cardioseal.shtml (accessed Aug 2003).



Letters to the Editor

Dear Editor:

Great job on this month's Medical Bulletin. I would like to see an article that discusses the Light Sport Aircraft [LSA] pilot and medical issues. Here is what I am seeing in my aeromedical practice...

I am now seeing previously medically certificated pilots who are transitioning to the LSA pilot status who under normal circumstances could not meet the requirements for medical certification for Class 1, 2, or 3. These people feel that just because they have a valid "unrestricted" driver's license that it okay to fly in the LSA class. Here are some examples...

- A previous Class 3 pilot allowed her medical to lapse so she could continue flying LSA. She has breast cancer, is receiving radiation, and is also on chemotherapy.
- A previous Class 3 pilot allowed his medical to lapse so he could continue flying LSA. He had advanced coronary artery disease and is taking Comadin.

- A previous Class 3 pilot allowed his medical to lapse so he could continue flying LSA. He is currently taking SSRI's for depression.

I pointed out to each of these pilots that under [Title 14 Code of Federal Regulations, part] 61.53 they [are] not okay to fly even LSA. They stated that FAR's don't count because they have a valid non restricted driver's license.

Who is right? Them or me???

My understanding of the regs is that ALL airman still need to meet the medical standards of Part 61. The ruling as told in various LSA brochures and lectures is indeed vague. The reg states... "Not know or have reason to know of any medical condition that would make that person unable to operate a light sport aircraft in a safe manner." People think that just because they can drive a car that they can fly LSA. I believe that this reg needs to be better spelled out for the lay public flying LSA. I believe very specific language needs to be created as a guide for people

who are "self certifying." Specific things like "you cannot fly LSA if you're taking SSRIs, Coumadin," and so forth.

Please let me know if my understanding of the regs is correct.

Bob Lewis, DO

Columbus, Ohio

Dear Dr. Lewis:

Actually, if considered "safe to fly" is based on a personal physician's impression, an airman can fly under Sport Pilot. So, consider, for example, a person with a cardiomyopathy, ejection fraction of 30%, no dysrhythmias, no CHF, and can pass a stress test. This person would, in fact, be eligible under Sport Pilot, but not likely under third-class certification rules. All those airman you described may be safe to fly under the Sport Pilot rules. Thank you for these excellent questions.

Warren Silberman, DO, MPH
Manager, Aerospace Medical
Certification Division



ALASKA BY AIR

Matthew Dumstorf, MD, MPH, is the new Deputy Regional Flight Surgeon, replacing Dr. **Robert Liska**, who retired this year.



A graduate of the University of Cincinnati College of Medicine, Dr. Dumstorf completed the Aerospace Medicine residency program at Wright State University and previously served as the American Airlines Area Medical Director based in Chicago.

Dr. Dumstorf is a Diplomate of the American Board of Preventive Medicine in Aerospace Medicine and is board eligible in Occupational Medicine. He is an Associate Fellow of the Aerospace Medical Association, as well as a member of the Airline Medical Director's Association and the Medical Director's Club of Chicago.

Dr. Marvin Jackson, MD, MPH,



a native Chicagoan, was recently appointed Flight Surgeon in the Great Lakes Regional Office. He attended Stanford University, majoring in biological sciences. He went on to attend medical school at Charles R. Drew University, in conjunction with UCLA. He completed a general surgery internship and six years of neurosurgery training in Washington, D.C., before joining the Aerospace Medicine residency program at Wright State University. Dr. Jackson is learning to fly and is a scuba diver. He will have responsibilities in the Great Lakes Region air traffic controller health program.

Thanks to Great Lakes Regional Flight Surgeon Dr. Nestor Kowalsky for these announcements.

Rough terrain, combined with treacherous weather conditions, leaves little margin for error while flying in Alaska.

To many individuals, Alaska is a scenic wonderland filled with glaciers and wildlife. Few are likely aware that the territory has a robust aviation presence—the rough terrain and limited roads make it easier for residents and tourists to navigate by plane rather than by automobile.

Dr. **Willis M. Simmons, Jr.** has been the regional flight surgeon for the Alaskan Region for the past two years. Simmons said while his duties are the same as regional flight surgeons in other regions, there are some things that make working in Alaska different.

Because there are no roads west of a line from Anchorage to Fairbanks that connect to anywhere else in the state, it is difficult for airmen to easily access medical care and testing that is often requested to maintain or attain certification, said Simmons. He joined the FAA from the Kelsey-Seybold Clinic, Houston, Texas.

Because the majority of Alaska's estimated 650,000 residents live within a 50-mile radius of Anchorage—site of the FAA regional headquarters—there is a dependence on aviation, rather than automobiles, as a means to transport people. Float planes and air taxis—twin-engine aircraft that hold four, eight, or nine passengers—are often the preferred form of transit. "Tourism is a big industry here—lodges fly guests in and out all summer, so we see lots of aviation activity involving smaller aircraft," said Simmons.

Simmons' office faces the challenge of ensuring that all pilots are certified. "A lot of folks come to Alaska to live their own lives, do their own thing without interference from authority," he said. "They are very independent-minded. You can't take away a pilot's license if he doesn't have one."

Along with his staff of four, Simmons tackles this challenge by spending time in the field, educating pilots

on why certification is important. "Our goal is to keep the airmen flying safely. The last thing we want is for someone to have a heart attack while in the air," said Simmons.

Simmons, who has logged more than 1,000 hours as a pilot, said that flying experi-

ence helps give him a better understanding of the skills pilots need to fly and how certain health problems can interfere with a pilot's ability to do so.

"Knowing what the environment is like makes you realize why hearing, for example, is so important," said Simmons, who is also an aviation medical examiner. "Flying truly gives you a better feel for what it's like on the pilot's end."

Because of the small office size in the Alaskan region, Simmons and his staff are able to maintain a good working relationship as well as an open line of communication with the airmen.

"Rather than writing letters to us, it's not unusual for airmen to drop by the office to check on their cases," said Simmons. "A lot of guys have been coming by the office for a long time, and they've gotten to know the staff on a first-name basis."

The efforts on the part of Simmons' office are all part of what keeps air transportation moving smoothly across the Alaskan skies.

— By Focus FAA



View from the cockpit in Alaska:
Challenging.

AirVenture 2006: 6 Hot Days in July



The FAA Office of Aerospace Medicine (OAM) again participated in the Experimental Aircraft Association's annual convention and fly-in at Oshkosh, Wis. The airshow was attended by some 625,000 visitors from more than 60 nations; 10,000 aircraft of virtually every shape and type flew in to the event, and there were more than 800 commercial exhibitors on hand to demonstrate their products and services.

The OAM booth again featured the popular presence of laptop computers configured for online access to the FAA's Document Imaging and Workflow System, thereby allowing about 950 booth visitors to obtain (with the help of FAA staff) a personalized interview

Dr. Wilson Chosen for Central Region

Larry F. Wilson, MD, has been selected as the new Central Regional Flight Surgeon in Kansas City, Mo. Dr. Wilson replaces **Joel A. Dickman, DO**, who is retiring later this year.



Dr. Wilson

Dr. Wilson's FAA career includes six years as a medical officer at the Civil Aerospace Medical Institute and two years as flight surgeon at the Southern Region air traffic control facility clinic in Miami, Fla.

His military career interrupted with deployments to Bosnia and Iraq, where he served in the U.S. Army National Guard as a flight surgeon.

and review of real-time information as to the status of their medical certification cases.

The Civil Aerospace Medical Institute-based Airman Education Program, staffed by **Rogers Shaw, II** and his crew, offered 500 pilots an exciting, hands-on "flying" experience, courtesy of their two spatial disorientation demonstrators.

Federal Air Surgeon Dr. **Fred Tilton** and Deputy Federal Air Surgeon Dr. **Jim Fraser** visited the booths and participated in the "Meet the Administrator Session" and the Experimental Aircraft Association's Aeromedical Advisory Council.

Dr. **Warren Silberman**, Manager of the Aerospace Medical Certification Division in Oklahoma City, helped man the medical booth and he also gave a presentation at an educational forum titled "The New Aeromedical Entry System."

The OAM booth was sponsored and staffed by the FAA Great Lakes Region Medical Office. On hand were CAMI Aerospace Medical Certification Division representatives Dr. **Larry Wilson** (Medical Officer), Dr. Silberman, and Great Lakes Regional representatives **Joan Morgan**, (Airman Certification Analyst), **Cliff Heart** (Certification Assistant), and Dr. **Nestor Kowalsky**, (Regional Flight Surgeon).

Thanks to Dr. Kowalsky for contributing this report.



Technology from page 1

there were virtually no complaints on this usually hot topic at this year's "Meet the Administrator" session.

The following excerpts are from the Administrator's remarks that pertained to certification:

"The changes we've made have reduced the average waiting time for a special issuance waiver from several months to 16 days. Now, averages are just that — an average — and some of you have likely waited longer than the average to get your certificate. That's because we do continue to see some very complex cases that require analysis and expert judgment.

"But more than 90% of the pilots who walk through the aviation medical examiner's door get their medicals on the spot. The other 10% now are looking at what's essentially a two-week wait. And that's as it should be. So, how did we do it?"

Reducing the Backlog

Working with the aviation community to identify ways to improve certification work flow, ideas were proposed, evaluated, and then enacted. "Specifically, we convened groups of FAA flight surgeons to process cases in the queue for review. This reduced the backlog immediately. Other groups will be convened whenever necessary to deal with future backlogs. We modified the system so that most cases can be reviewed electronically instead of manually. We also made it so that the regions can work cases that previously could only be worked by the Aerospace Medical Certification Division in Oklahoma.

"We expanded the aviation medical examiner assisted special issuance process that allows the AME to issue waivers for specific medical conditions. We increased it from 20 conditions to 35 conditions — renal cancer, melanoma, bladder cancer, heart attacks, bypass

Continued on page 12

Technology from page 11

surgery, to name a few. We also actively pursued the EAA and other associations to encourage AMEs to participate in the special issuance process.”

New Rules to Reduce Certification Intervals

“We didn’t stop there. We started a rulemaking that will propose to extend

the interval for first-class medical certification from six months to one year. For third-class medicals for pilots under 40 — from two years to five years. These two interval changes are consistent with the changes that ICAO [International Civil Aviation Organization] is making. It is estimated that these two changes will reduce annual applications by 75,000 and therefore provide better, quicker service to others.

‘Better Than 30 days’

Because medical certification is an issue that affects every pilot, the aviation community is greatly interested in getting speedy results. Blakey pointed out that while the FAA certifies about 450,000 pilots per year, “the goal is to get better than 30 days and maintain it. We’re there. But I promise you we’re pushing to get better.”



Lymphoma from page 7

think for a second or two when searching for a specific word. He has had no seizures since his initial presentation and has discontinued anticonvulsant medication since 2000. Follow-up MRI exams of the head in March and September 2001 were remarkable only for postoperative changes, and mild encephalomalacia. His EEG in July 2003 revealed focal slowing in the left parietal region with no epileptiform changes. He was granted special issuance of a Class-1, time-limited certificate valid for 12 months.

References

1. Federal Aviation Administration. *Guide for Aviation Medical Examiners*. October, 1999, ch 3, p 64.
2. Federal Aviation Administration. *Aero-medical Certification Reference Manual*, July 2003, ch 11, p 3.
3. Rayman RB, Hastings JD, William BR, et al. *Clinical Aviation Medicine 3rd ed.*, Castle Connolly Graduate Medical: 2000, pp 69-71, 313-4.
4. Behin A, Hoang-Xuan K, Carentier AF, et al. Primary brain tumours in adults. *Lancet*. 2003 Jan 25;361:323-31.
5. Schlegel U, Pels H, Oehring R, et al. Neurologic sequelae of treatment of primary CNS lymphomas, *J Neurooncol*. 1999;43:277-86.
6. Maher EA, Fine HA, Primary CNS lymphoma, *Semin Oncol*. 1999;26:346-56.



Aviation Medical Examiner Seminar Schedule 2006

December 11 – 15	Oklahoma City, Okla.	Basic (1)
------------------	----------------------	-----------

2007

January 19 – 21	San Diego, Calif.	NPN (2)
February 2 – 4	Oklahoma City, Okla.	Basic (1)
March 16 – 18	Bellevue, Wash.	CARDIO (2)
May 14 – 17	New Orleans, La. (AsMA)	AP/HF (3)
June 11 – 15	Oklahoma City, Okla.	Basic (1)
July 13 – 15	Oklahoma City, Okla.	NPN (2)
August 17 – 19	Washington, D.C.	OOE (2)
August 27 – 31	Oklahoma City, Okla.	Basic (1)
September 14 – 16	Savannah, Ga.	CARDIO (2)

CODES

AP/HF Aviation Physiology/Human Factors Theme

CARDIO Cardiology Theme

OOE Ophthalmology - Otolaryngology - Endocrinology Theme

N/NP/P Neurology/Neuro-Psychology/Psychiatry Theme

(1) A 4½-day basic AME seminar focused on preparing physicians to be designated as aviation medical examiners. Call your regional flight surgeon.

(2) A 2½-day theme AME seminar consisting of 12 hours of aviation medical examiner-specific subjects plus 8 hours of subjects related to a designated theme. Registration must be made through the Oklahoma City AME Programs staff, (405) 954-4830, or -4258.

(3) A 3½-day theme AME seminar held in conjunction with the Aerospace Medical Association (AsMA). Registration must be made through AsMA at (703) 739-2240. A registration fee will be charged by AsMA to cover their overhead costs. Registrants have full access to the AsMA meeting. CME credit for the FAA seminar is free.

The Civil Aerospace Medical Institute is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

Cox subscribers

If you have activated Cox's Spam Blocker, you may have configured this service to "Delete incoming junk E-mail." This setting deletes suspected spam E-mails before you ever see them. Unfortunately, sometimes E-mails you want to receive, such as those from FAA, may be deleted mistakenly in the process. To prevent this, select the "Label Junk E-mail as Spam" option through your account's Member Services. This setting will deliver all E-mail to your inbox, but messages that are suspected of being spam will include "spam" in the subject line of the E-mail. If Spam Blocker identifies our FAA E-mails as spam, please submit this "false positive" to Cox at ThisIsNotSpam@cox.net. Although this will not immediately guarantee you will receive our E-mails in your inbox, it will help Cox improve their filtering technology.

Earthlink subscribers

Add us to your address book to receive our incoming E-mail messages:

Click on the "Address Book" link in your Web Mail account.

Click the "Add" button or "Add to Address Book" link.

Fill in our E-mail address: "ame.seminar.registration@faa.gov".

Mac.com subscribers

If you see that our E-mails have been incorrectly classified as *junk*, select the message and click the "NOT JUNK" icon in the toolbar. Or navigate the following path: Message > Mark > As Not Junk Mail. This will train the system to recognize that you want to receive our E-mail messages.

Microsoft Outlook 2003

To make sure all the images in the email appear correctly, add "ame.seminar.registration@faa.gov" to your safe list.

On the Tools menu, click Options.

On the Preferences tab, click Junk E-mail.

Select the Safe Senders or Safe Recipients tab and click Add.

Type "ame.seminar.registration@faa.gov" in the box that says "Enter an E-mail address or Internet domain name (i.e. <http://www.faa.gov>) to be added to the list," then click OK.

For more information, click on the Help menu in the top toolbar, then select Microsoft Office Outlook Help.

Type "safe sender list" into the Search box.

MSN and Hotmail subscribers

Add us to your "Safe List" to receive our incoming E-mail messages:

Click the "Options" link at the top right of your E-mail account.

On the left side of the page, click "Mail," and then click "Junk E-mail Protection."

Click "Safe List."

Type "ame.seminar.registration@faa.gov" into the open field and then click "Add."

Optimum Online Webmail subscribers

Occasionally, Optimum Online mistakenly filters E-mails you want to see and routes them to your bulk mail folder. This is called a "false positive." If you see a FAA E-mail falsely categorized as spam, check the box next to the message in your bulk mail folder, and then click the "This is not Spam" icon on the Webmail toolbar. If you already have the message open, simply click the "This is not Spam" icon on the toolbar within the message. In either case, once you click the icon, the message will be reported automatically to Optimum Online and relocated to your inbox. However, this will not immediately guarantee you will receive subsequent FAA E-mails in your inbox.

Road Runner subscribers

Road Runner often blocks large ranges of IP addresses in an effort to protect its network from spam. Legitimate E-mail senders often get blocked in the process. It's as if Road Runner were blocking all incoming phone calls from an entire area code because of problematic phone calls from a specific phone number. Other than complaining to Road Runner's customer service, there isn't much you as a Road Runner customer are empowered to do to fix this situation. We are taking steps to resolve the issue with Road Runner; however, in the meantime, you may want to subscribe to our E-mails using an alternate address.

USA.NET subscribers

To configure your personal white list filters to ensure you'll receive mail from FAA, follow these steps:

Go into "Services" on the navigation bar on the left.

Click "White List Filtering."

Select "Override" and click the "New" button.

Type FAA to the right of the "Subject contains" option.

Click "OK."

Yahoo! and SBC subscribers

Create a filter so that our E-mails always reach your inbox:

Click the "Mail Options" link in the top right navigation bar in your E-mail account.

Click "Filters" on the bottom left side of the page, under the Spam column.

Click the "Add Filter" link.

Type FAA to the right of "From header contains:".

Choose the destination folder to which you would like the message delivered. The suggested destination is your inbox.

Be sure to click the "Add Filter" button to put your new filter into effect.

Notes

1. America Online
2. Electronic junk mail. Spam filters are designed to automatically identify and obliterate junk mail, within limits that you or the software can program